CLAIMS

I claim:

1. A method for the transmission of information between a track and a vehicle located on the track in a model railroad system, said method comprising:

using at least one capacitor that exists between the vehicle and the track for the transmission of information in the event of a loss of electrical contact between the vehicle and the track, and detecting the information transmitted via said capacitor.

2. The method as claimed in claim 1, in which the loss of electrical contact between the vehicle and the track includes a loss of electrical contact between a wheel of the vehicle and a rail of the track, and said capacitor is a capacitor that then exists between the wheel and the rail.

3. The method as claimed in claim 1, in which using said at least one capacitor which exists between the vehicle and the track is supplemented by the provision of additional capacitors between the vehicle and the track, wherein said additional capacitors are realized by at least one of the following measures: the provision of additional contact pickup areas; the utilization of existing additional contact pickup areas between the vehicle and the track; the utilization of areas on the vehicle that are relatively far from the track; and an increase of the dielectric constant of the capacitor between the vehicle and the track.

4. The method as claimed in claim 1, wherein the model railroad system uses a square wave voltage as the information transmission signal, and the method includes detecting and evaluating spikes that occur in said at least one capacitor

5. The method as claimed in claim 4, in which said square wave voltage is selected from a group consisting of a track signal of a digital model railroad system which is modulated according to control information, whereby the square wave voltage is regenerated from the spikes and a square wave voltage which is superimposed on a DC or AC voltage that is applied to the track, whereby the information to be transmitted is regenerated from the spikes.

6. The method as claimed in claim 1, in which the model railroad system has one of a DC voltage and a low-frequency AC voltage applied to the track, the method includes superimposing a higher-frequency information transmission signal on the one of the DC voltage and the low-frequency AC voltage, and detecting the information transmission signal via the capacitor.

7. The method as claimed in claim 2, in which the model railroad system has one of a DC voltage and a low-frequency AC voltage applied to the track, the method includes superimposing a higher-frequency information transmission signal on the one of the DC voltage and the low-frequency AC voltage, and detecting the information transmission signal via the capacitor.

8. An apparatus for the transmission of information between a track and a vehicle located on the track in a model railroad system, said apparatus comprising:

at least one capacitor formed between the vehicle and track and constituting a means for the transmission of information comprised in a signal applied to the track; and

means (15, 16, 17, 18, 19; 45, 46, 47, 48, 49, 50, 51) for detecting and processing signals transmitted via said capacitor in the event of the loss of electrical contact between the vehicle and the track.

9. The apparatus as claimed in claim 8, in which said capacitor is formed between a wheel of the vehicle and a rail of the track, and said means (15, 16, 17, 18, 19; 45, 46, 47, 48, 49, 50, 51) for detecting and processing said signals detects and processes said signals in the event of the loss of electrical contact between the wheel of the vehicle and the rail.

10. The apparatus as claimed in claim 8, in which at least one additional capacitor is provided between the vehicle and the track, said at least one additional capacitor is realized by at least one of the following measures: the provision of additional contact pickup areas; the utilization of existing additional contact pickup areas between the vehicle and the track; the utilization of areas on the vehicle that are spaced from the track; and an increase of the dielectric constant of the capacitor between the vehicle and the track.

11. The apparatus as claimed in claim 8, in which the signals transmitted are spikes that originate from a square wave information signal, and said means (15, 16, 17, 18, 19) contain a circuit that detects the spikes and from them regenerates the information to be transmitted.

12. The apparatus as claimed in claim 8, in which the signals transmitted are spikes and the spikes originate from a square wave voltage that is modulated in accordance with digital control information, and said means (15, 16, 17, 18, 19) for detecting and processing said signals includes a logic circuit (19) which regenerates control information from the amplified spikes.

13. The apparatus as claimed in claim 8, in which the signals to be detected by the means for detecting and processing said signals are in the form of an AC voltage which is superimposed on an analog track voltage, and which is transmitted via the capacitor that exists between the vehicle and the rail even in the event of the loss of electrical contact between the vehicle and the track.

14. The apparatus as claimed in claim 8, including an energy-storage device (33) to provide a supply of energy when there is no electrical contact between the track and the vehicle.

15. The method as claimed in Claim 1, including providing a supply of energy when there is no electrical contact between the track and the vehicle using an energy-storage device (33).